CITY COUNCIL AGENDA MEMORANDUM

SUBJECT

Resolution No. authorizing execution of a professional services agreement with Watershed Science and Engineering for engineering services, for the Vasa Creek Basin Hydrologic and Hydraulic Modeling and Analysis project, in the amount of \$77,084.

FISCAL IMPACT

This contract obligates the City to an amount up to \$77,084. This work is included in the adopted 2013-2014 Budget, as part of the Utility Comprehensive Planning Proposal 140.09NA. Sufficient budget exists within the 140.09NA Comprehensive Planning budget for 2013 and 2014 to fully fund this contract.

STAFF CONTACT

Nav Otal, Director, 452-2041 Paul Bucich, P.E., Acting Assistant Director, 452-4596 *Utilities Department*

POLICY CONSIDERATION

City Comprehensive Plan policies:

- UT-23 Manage the storm and surface water system in Bellevue to maintain a hydrologic balance in order to prevent property damage, protect water quality, and provide for the safety and enjoyment of citizens, and preserve and enhance habitat and sensitive areas.
- EN-28 Utilize best management practices and technology in city projects to demonstrate effective environmental stewardship and long-term fiscal responsibility.

Council direction:

Ordinance No. 2645 directs Bellevue to participate in the National Flood Insurance Program (NFIP) and NFIP minimum requirements as outlined in the Code of Federal Regulation: 44 CFR Chapter 1, subpart B.

<u>Utilities Department practice:</u>

Basin technical studies, such as hydrologic and hydraulic modeling and analysis, are
considered best management practices in stormwater management as they are proactive;
assure accurate management information; improve system operation efficiency and
effectiveness; and make recommendations for long term capital investments to address
existing inefficiencies and deficiencies.

City Contracting policies:

• BCC 4.28 provides for the fair and equitable treatment in the purchasing process. Because the amount of the contract exceeds \$50,000, Council approval is required.

BACKGROUND

The Utilities Department undertakes technical basin studies to identify whether there are unknown issues in a basin, causes of specific known problems, such as road or structural flooding, water quality problems, and identification of issues such as incorrectly mapped floodplains. Data-driven adaptive planning is vital to responsible stewardship of fiscal and natural resources, and sustainable management of infrastructure. These studies evaluate operational, capital, and management strategies before recommending best solutions.

Utilities staff did an evaluation of technical study needs based upon an assessment of known basin issues and needs across all city drainage basins. The criteria for technical studies prioritization included: flood protection, water quality, and stream habitat and then cross correlated with coordination opportunities with other departments or initiatives; data gaps; community or regional interests; and fiscal stewardship. Vasa Basin ranked highest based on technical issues including hydrologic and hydraulic model needs.

This Vasa Creek hydrologic and hydraulic study will address an inaccurately defined floodplain that, in places, is totally separated from the stream. This is important for the National Flood Insurance Program, because the floodplain designation influences housing loans, insurance rates, and hazard risks. Therefore, incorrect floodplain maps will cause unnecessary paperwork and expenses for properties outside the floodplain and potentially miss flood hazards that do exist but are not identified on the map.

With Council Resolution No. 8393, dated May 7, 2012, the City obtained responsibility for a high flow bypass from I-90 to Lake Sammamish for which flows and operational periods have not been quantified. This high flow bypass was previously owned by the South West Lake Sammamish Flood Control Zone District (District). Through dissolution of this District, necessitated by the formation of the new King County Flood Control District, Bellevue accepted ownership of certain assets and responsibilities of the District.

This scope of work will result in a model of existing stream and piped system flows; an analysis of and a delineation of accurate 100 and 500 year floodplains, and submittal of the corrected floodplains information to FEMA so they may correct federal regulatory maps. The area of evaluation for Vasa Creek exclusive of the high flow bypass has been increasingly a part of the City since annexations starting in the 1980's through the present (multiple annexations). This basin has not been modeled by King County nor the City previously.

The consultant selection process for this project was consistent with the City's policies and procedures. Upon review of the firm's qualifications through the selection process, Watershed Science & Engineering Inc. was selected based on the firm's qualifications and experience with hydrologic and hydraulic modeling, their knowledge and experience with FEMA floodplain mapping, the community information and involvement process, and the strength of their references.

As required by state law relating to contracts for architectural and engineering services, the City selects the consultant deemed to be the most highly qualified for a given project. State law precludes using cost as a basis for selection of engineering firms.

EFFECTIVE DATE

If adopted, this Resolution will become effective immediately.

OPTIONS

- 1. Adopt Resolution No. <u>8677</u> authorizing execution of a professional services agreement with Watershed Science and Engineering for engineering services, for the Vasa Creek Basin Hydrologic and Hydraulic Modeling and Analysis project, in the amount of \$77,084.
- 2. Do not adopt the Resolution and provide alternative direction to staff.

RECOMMENDATION

Adopt Resolution No. <u>\$677</u> authorizing execution of a professional services agreement with Watershed Science and Engineering for engineering services, for the Vasa Creek Basin Hydrologic and Hydraulic Modeling and Analysis project, in the amount of \$77,084.

MOTION

Move to adopt Resolution No. <u>\$\sigma\sqrt</u>

ATTACHMENTS

Proposed Resolution No. 8677

AVAILABLE IN COUNCIL OFFICE

Consultant Contract

CITY OF BELLEVUE, WASHINGTON

RESOLUTION NO. 8677

A RESOLUTION authorizing the execution of a professional services agreement with Watershed Science and Engineering, in an amount not to exceed \$77,084 for engineering services for the Vasa Creek Basin Hydrologic and Hydraulic Modeling and Analysis project.

THE CITY COUNCIL OF THE CITY OF BELLEVUE, WASHINGTON, DOES RESOLVE AS FOLLOWS:

execute a professional services agreement wi Engineering, in an amount not to exceed \$77, Vasa Creek Basin Hydrologic and Hydraulic M of which agreement has been given Clerk's Ro	ith Watershed Science and ,084 for engineering services for the Modeling and Analysis project, a cop	
Passed by the City Council this and signed in authentication of its passage thi 2013.	_ day of, 2013 is day of	_1
(SEAL)		
	Conrad Lee, Mayor	_
Attest:		
Myrna I Basich City Clerk		